NAVSTABREMINST 11300.1
N444.90

NAVAL STATION BREMERTON INSTRUCTION 11300.1

From: Commanding Officer, Naval Station Bremerton

Subj: ENERGY AND WATER CONSERVATION PROGRAM

Ref: (a) OPNAVINST 4100.5D, Energy Management
(b) OPNAVINST 5090.1B, Environmental and Natural Resources Program Manual
(c) Executive Order 13123, Greening the Government Through Efficient Energy Management
(d) NAVSHIPYDPUGETINST P11320.1F, Fire Prevention and Protection Manual, Volume IV, Ch. 7, Par. 2b

Encl: (1) Utility Usage Guidelines

1. Purpose. To establish energy and water conservation policy, procedures and guidelines, according to references (a) and (b), to assist the Bremerton Naval complex in attaining energy conservation goals and utility cost savings.

2. Cancellation. This instruction replaces NAVSHIPYDPUGETINST 11300.8D and NAVSHIPYDPUGETINST 11330.3.

3. Background. The conservation of energy and water continues to be an important national goal that is strongly supported by the Navy. The Chief of Naval Operations has mandated that action be taken to conserve energy and water. References (a), (b), and (c) establish energy and water conservation goals and standards for all shore activities.

4. Scope. This instruction applies to all employees of the Bremerton Naval complex, consisting of Naval Station Bremerton, Puget Sound Naval Shipyard, and all tenant activities.

5. Policy. The policy of the Bremerton Naval complex is to use only that quantity of energy and water necessary for the effective performance of their mission, and to support and comply with the energy and water conservation guidelines of references (a) and (b). Effective management of the Bremerton Naval complex requires every effort be made to achieve maximum conservation and efficient use of all energy and water resources. Enclosure (1) establishes the Bremerton Naval complex policy on energy and water usage.

6. Definitions

a. Area Specific Check Point List (ASCPL). A checklist of utilities (lighting, HVAC, water, etc.) within the Energy Monitor's specific work area and how they are controlled. The checklist make up is dependent upon the specific work area and is developed by the Energy Monitor. A generic checklist can be obtained from the Energy Conservation Manager.

b. Energy Coordinator. Assigned by each department head to coordinate energy and water conservation measures within the specific department or building. Energy Coordinator duties can be assigned to the Building Manager.

c. Energy Monitor. Assigned by the department Energy Coordinator to maintain energy and water conservation measures within their specific work area.

7. Responsibilities

a. The Facilities and Maintenance Officer, Code N444, the overall coordinator for the Bremerton Naval complex Energy and Water Conservation Program, will coordinate the overall effort for the conservation measures contained in the instruction.

b. Utilities Superintendent, N444.53, is the overall manager for utility distribution within the Bremerton Naval complex, with direction and guidance from the Facilities and Maintenance Officer. The Utilities Superintendent will:

(1) Investigate leaks in the steam, compressed air, natural gas, and water systems on the day they are reported. The repairs will be given priority when scheduling repair work.

(2) Perform a leak detection survey on the central water distribution system every seven years and initiate action for repair of discovered leaks.

c. The Energy Conservation Manager, Code N444.90, with direction and guidance from the Facilities and Maintenance Officer, will:

(1) Function as program manager for all energy and water conservation matters.

(2) Distribute pertinent energy and water conservation information material to energy coordinators.

(3) Conduct energy and water conservation spot checks, studies, and audits. Notify the department heads of the results.

(4) Provide assistance where there is difficulty in meeting the conservation measures contained in this instruction.

(5) Prepare the Shore Activity Energy and Water Management Annual Report.

(6) Develop and maintain a Bremerton Naval complex Conservation Plan of Action, which establishes specific goals and objectives for reducing energy and water consumption. The Plan will be updated annually and approved by the Facilities and Maintenance Officer.

(7) Review all renovation and construction projects for compliance with the energy and water conservation goals and objectives of the Bremerton Naval complex.

(8) Seek funding for Energy and Water Conservation projects.

(9) Serve as Chair of the Energy Conservation Steering Committee.

d. Energy Conservation Steering Committee will:

(1) Consist of department representatives from Naval Station Bremerton, Puget Sound Naval Shipyard, Fleet Industrial Supply Center and tenant activities.

(2) Meet, at a minimum, once every three months.

(3) Make recommendations and establish procedures to reduce energy use, water use and overhead costs.

(4) Initiate actions to increase energy and water awareness for all Bremerton Naval complex personnel.

e. Naval Station Bremerton Department Heads and commands on board Naval Station Bremerton complex will:

(1) Designate Department Energy Coordinators and notify Code N444.90 within 30 days of their appointment.

(2) Instruct all supervisors to take action in their respective areas for the conservation measures contained in this instruction.

(3) Ensure that NAVSHIPYD PUGET Process Instruction 0904-631J is in use when using running water for freeze protection.

f. Energy Coordinators will:

(1) Designate Energy Monitors for their area of cognizance.

(2) Survey their area of responsibility with their Energy Monitors to ensure compliance with this instruction and their Area Specific Check Point List (ASCPL). The ASCPL will be completed by the Energy Monitors and submitted to Code N444.90 annually.

(3) Serve as point-of-contact for energy and water matters within their designated shop or code.

(4) Ensure compliance with conservation measures on a continuing basis and coordinate the activities of their Energy Monitors.

(5) Task Energy Monitors to tour their work area near the close of each business day to ensure personnel are securing all appropriate energy and water consuming equipment.

g. Energy Monitors will:

(1) Assume ownership for their cognizant shop or code with regard to energy and water use and compliance with the conservation guidelines identified in enclosure (1).

(2) Serve as point-of-contact for energy and water matters within their designated area.

(3) Coordinate, execute, and monitor energy and water conservation efforts within their designated area.

(4) Accomplish daily building energy inspections, using the ASCPL as a guide.

8. Action. Addressees will comply with the provisions in this directive.

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NAVSTABREMINST 5216.1
Lists I and II
Copy to: 1102.3, 1142.3(5), N444.12(2), N444.90(2)

UTILITY USAGE GUIDELINES

1. Facility Operation, Maintenance and Repair

a. Personnel will ensure that all doors, windows, and vents are kept closed in areas that are heated or air conditioned.

b. Personnel are encouraged to position venetian blinds, curtains, and other solar screening devices to allow maximum solar penetration, where appropriate, while heating, and minimum solar penetration while cooling.

c. Repairs and alterations to existing buildings will include the following: (Note: Any work to historically significant structures must be first approved by PSNS C/106.3. Cultural Resources Program Manager).

(1) Energy efficient lighting.

(2) Occupancy sensors to control lighting in all areas where such use will be appropriate as determined by the Energy Conservation Manager, Code N444.90.

(3) Water conserving fixtures and equipment in bathrooms, showers, kitchens, and industrial processes, where appropriate.

(4) Double glazed windows, insulated doors, and insulation with “U” values established by The Washington State Energy Code for work and office spaces that are heated to at least 70 degrees Fahrenheit, and cooled to at least 76 degrees Fahrenheit.

(5) Uninsulated buildings or structures will not be heated without written approval of Code N444.90.

2. Heating, Ventilating, and Air Conditioning (HVAC) Systems

a. Energy conserving controls with automatic temperature setback will be used on Heating, Ventilation, and Air Conditioning (HVAC) systems. These systems include, but are not limited to, Direct Digital Controls (DDC), Energy Monitoring and Control Systems (EMCS), and programmable thermostats.

b. The EMCS controls, and any other energy conservation controls, will not be tampered with, disconnected, or disabled.

c. The HVAC equipment will be inspected and maintained on a routine basis.

d. Retrofitting fossil fuel burning equipment to natural gas, heat recovery systems, thermo storage, and other new

technologies, will be considered in new construction and renovations.

e. Water supply systems for HVAC systems will be designed to use the least amount of water necessary. Cooling towers will be adjusted and maintained to conserve water. Recirculating cooling units will be used instead of single-pass water cooling, where appropriate.

f. Portable electric heaters and window air conditioners can only be used in designated facilities with the written approval of Code N444.90. Written approval from Code N444.90 must accompany any procurement documents or Job Material Lists (JMLs).

g. Shop 99 may purchase and use portable electric heaters for temporary waterfront service support, but use of heaters in permanent facilities requires Code N444.90 approval.

h. Shop 99 will not install heating services in uninsulated structures or buildings without written approval from Code N444.90. Shop 99 will request an approved Waterfront Temporary Service Heating Installation Request, PSNS 11370/1 (Rev. 12-95) from the customer prior to installing heating services. The customer must request the form and approval from the Energy Conservation Office at 476-2696.

i. Any portable electric heater purchased for use in the Bremerton Naval complex must comply with Underwriters Laboratory (UL), Standard 1995, and reference (d).

3. Temperature Settings

a. Temperature settings will be as follows:

Time of Year	Temperature Settings	
	Office	Shop
Heating Season (15 Nov to 1 Apr)	70°F Max.	65°F. Max.
Cooling Season (1 Jun to 15 Sep)	76°F Min.	78°F Min.

b. Requests to maintain buildings or areas at temperatures other than those specified in paragraph 3a will be submitted to Code N444.90. Requests will be by memorandum stating the justification for the requirements, and will be signed by the requesting activity department head.

c. Temperature control devices will be set to maintain not more than 50 degrees during nonworking hours.

d. Buildings with local heating controls will be turned on no earlier than one hour prior to occupancy.

e. Reduce or turn off heat during the last hour of occupancy.

f. Unoccupied or occasionally occupied spaces will be heated to the minimum temperature necessary to protect the contents from deterioration and/or freezing. The temperature required for freeze protection is 40 degrees.

g. Secure heating systems in vacant storage areas where there are no temperature requirements for stored material.

h. Domestic hot water will be set no higher than 105 degrees measured at the delivery point.

4. Lighting

a. All outdoor lighting will have photocell or timer controls where appropriate. Lighting without these controls will be manually turned off during daylight hours.

b. Turn off lighting in unoccupied buildings and spaces.

c. Operate recreational lighting only to support recreational events.

d. Lighting used during lunch breaks will be reduced to minimum acceptable levels. Industrial lighting or general shop lighting levels will be reduced to a maximum of 30 percent when compared to the productive lighting level.

e. The Energy Monitors will be responsible for lunch break lighting reduction in the following Buildings: 58, 107, 367, 368, 426, 427, 431, 435, 448, 450, 452, 455, 457, 460, 461, 462, 469, 500, 851, 856, 857, and 873. Lighting levels will be reduced in the Buildings listed above in all areas that are not occupied during lunch break.

f. Provide energy efficient lighting to include electronic ballasts and T-8 fluorescent bulbs. Only energy efficient lights and ballasts are to be stocked in shop stores and used in lighting relamping projects.

g. High-pressure sodium or metal halide lighting should be used to replace less efficient mercury vapor lighting in all shops, warehouses, and industrial areas during upgrades and renovations.

h. Christmas tree lights will not be permitted in shops and offices.

i. Lighting illumination levels will be per the latest revision of the Illuminating Engineering Society of North America (IES) lighting manual. Code N444.90 will establish specific illumination levels not covered in the manual.

5. Water

a. Thermostatically controlled heat tape and automatic freeze protection valves will be used for freeze protection in lieu of running water continuously when practical.

b. Dockside and pierside continuous running drinking fountains will be secured on backshifts, weekends, and extended shutdowns.

c. Using pressurized potable water to clean sidewalks, driveways, loading docks, etc., is prohibited unless required by a process instruction, sanitation purposes, or an emergency condition.

d. Upon completion of the use of air conditioning, industrial and/or other equipment that uses single pass water cooling, the water will be shut off after allowing the equipment to cool down.

e. Sprinkling roofs to accomplish cooling is prohibited unless approved by Code N444.90.

f. Water hoses used for washing automobiles, trucks, trailers, and other equipment, will use an automatic shutoff nozzle.

g. Watering lawns and plants should be performed before 1000 or after 1800 hours, to minimize evaporation unless operational requirements prohibit watering during these times. All watering devices will be adjusted to minimize overspray onto areas not requiring watering. Watering will be done to meet soil moisture requirements versus scheduled watering.

h. All new facilities or major modifications with an average water load greater than five gallons per minute will include a water meter. The meter will be capable of being read remotely by the Energy Management and Control System (EMCS). Temporary services are exempt from this requirement.

i. New equipment will use automatic freeze protection or heat tape when practical instead of running potable water.

6. Transportation

a. Vehicles parked for more than 1 minute will be shut off. Vehicle start up problems does not justify extended idling; such vehicles are to be repaired.

b. Start up: Engines will be idled for no longer than is necessary to produce sufficient temperature and pressure for driving. For sedans, carryalls, and light trucks, this is usually 30 seconds to one minute with a maximum of two minutes. Heavier trucks with air brakes should be idled no longer than three minutes or until sufficient air pressure is obtained.

7. Automated Data Processing (ADP) Equipment

a. Unless required to remain powered on continuously as determined by an ADP representative, all computer monitors, printers, modems, disk drives, and other connected equipment will be turned off at the end of each business day. Each individual using the equipment will be responsible for turning it off at the end of each day.

b. All photocopiers will be turned off at the end of each business day unless the copier will be used during the backshifts.

c. Personal Computer (PC) monitors will be de-energized at the close of each business day, even if connected to a network.

8. Other

a. Purchased or leased equipment will be energy efficient models, where applicable and cost-effective.

b. All new construction will have the capability for metering utilities.

c. Secure exhaust fans, office equipment, industrial equipment, and shop machines when not in use.

d. Operate heating plants at the optimum temperature and conditions to obtain maximum efficiency.